A NOTE ON THE WORK OF THE WORLD HEALTH ORGANIZATION (WHO)

Contents

These notes outline the principles, methods of work and achievements of the World Health Organization during its 30 years of existence. They do not attempt to cover more than a fraction of the manifold technical activities of the Organization.

For further reading see:

Basic Documents (Twenty-sixth Edition) Geneva 1976;
The First Ten Years of the World Health Organization, 1958;
The Second Ten Years of the World Health Organization, 1968;
For the last seven years, the introduction by the Director-General to his Annual Reports for 1968-1975 and the Programme and Budget statements for the same period should be consulted;
For the main aims of the programme, the Fifth and Sixth General Programmes of Work covering a specific period (documents EB55/WP/5 and EB57/27 and Corr.1) should be consulted;
For publications, see catalogue of World Health Organization Publications 1947-1973 and supplements.

1. THE OBJECTIVE OF THE WORLD HEALTH ORGANIZATION

The World Health Organization was created in the aftermath of war. From the chaos which then existed and throughout the major political upheavals which followed, the guiding principles of its Constitution developed into a practical and effective instrument for promoting the welfare of mankind and reducing a potent source of conflict, namely, the gap between the health status of the rich and the poor.

The movement for peace so actively and substantially supported by Alfred Nobel has achieved expression in the United Nations system which has peace as its major objective.

WHO is a specialized agency of the UN and the following quotations from those who founded it and have directed its destinies reflect a consensus of view between Nobel and his successors.

The message from Harry S. Truman, President of the United States of America, to the first meeting of the Interim Commission of the World Health Organization in 1946 states:

> "The health problems which we face did not originate with the war. ..... Furthermore modern transportation has made it impossible for a nation to protect itself against the introduction of disease by quarantine. This makes it necessary to develop strong health services in every country which must be coordinated through international action. The new health organization will serve this field. Just as international cooperation in science played a most important part in winning the war so will such cooperation win the battle against disease and malnutrition."

Professor Andrija Stampar of Yugoslavia in his Presidential address to the First World Health Assembly in 1948 said:

> "Disease is not brought about only by physical and biological factors. Economic and social factors play an increasingly important part in sanitary matters which must be tackled not only from the technical, but also from the sociological point of view. Although medicine is over 5,000 years old and modern science about 150, it is only during the last 50 years that this idea has gained ground. Health should be a factor in the creation of a better and happier life. Since health for everyone is a fundamental human right, the community should be obliged to afford all its peoples health protection as complete as possible. The preamble to our Constitution represents, therefore, a great victory, embodying as it does this correct conception of public health, and thus throwing a guiding light on the long and difficult path ahead.

"There also looms ahead another task for the World Health Organization - to contribute to the development of a new type of physician and specialized health worker, the type who will devote his services to those with impaired health, at the same time realizing that this is only part of the duties and work of the modern public health doctor. The aim should be to contribute fully to the accomplishment of health for everybody, in the widest sense of that word. If we proceed in this way, the World Health Organization may well become a powerful pioneer of world peace and understanding among nations. We have in our initial work applied these principles, but we must embed them more deeply in the years to come and let the words of our Constitution be followed by deeds."

During their earliest deliberations the founders of the Organization realized that to confront the vast and varied tasks that lay ahead a clear and forthright statement of principles, objectives and methods of work was required. The Constitution of the World Health Organization was designed to be that instrument. It states in unmistakeable terms their conviction that the health of all peoples is fundamental to peace and that it can only be achieved by the fullest cooperation of all.

The preamble to the Constitution reads:

"The States Parties to this Constitution declare, in conformity with the Charter of the United Nations, that the following principles are basic to the happiness, harmonious relations and security of all peoples:

Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political belief, economic or social condition.

The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest cooperation of individuals and States.

The achievement of any State in the promotion and protection of health is of value to all.

Unequal development in different countries in the promotion of health and control of disease, especially communicable disease, is a common danger.

Healthy development of the child is of basic importance; the ability to live harmoniously in a changing total environment is essential to such development.

The extension to all peoples of the benefits of medical, psychological and related knowledge is essential to the fullest attainment of health.

Informed opinion and active cooperation on the part of the public are of the utmost importance in the improvement of the health of the people.

Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures."

From these principles arises a single objective -

"The attainment by all peoples of the highest possible level of health". (Article 1 of the Constitution)

2. FRATERNITY AMONG NATIONS

2.1 Bridging the gap

Two main thoughts seem to have guided Nobel in his philosophy of peace: the social problems underlying unrest and the need for collective security based on agreements between governments and the fraternal cooperation among peoples. During the war these same thoughts motivated President Roosevelt who saw the increasing disparity between the affluent and the poor countries as a major potential cause of future conflict. Current history confirms his fear. The United Nations and its specialized agencies, of which WHO is one, have devoted most of their resources to obtaining agreement between governments and assisting them to bridge the social, economic and technological gap which divides the rich and the poor. The most powerful driving force in the World Health Organization's efforts to bridge the health gap has been its ability to rely on the fraternal cooperation of its Member States. In the last thirty years these have deepened and extended to cover all regions of the world. This free and practical cooperation has resulted in health being the outstanding sector in which the narrowing of the gap is actually being achieved.

On the initiative of the Brazilian and Chinese delegations to its San Francisco Conference in 1945 the UN declared that medicine is "one of the pillars of peace", incorporated it in its Charter and made preparations to create a worldwide organization which could mobilize the world's resources to combat the immediate hazards of pestilence and famine and develop these resources for the long haul of social, technical and administrative development which would enable all peoples to enjoy the health status which current knowledge made possible.

The rapid recovery of the more developed countries from the aftermath of war underlined starkly the gap which separated them from the less developed countries with their chronic load of sickness and their lesser ability to mobilize the means of dealing with it.

A Technical Preparatory Committee of 16 nations met in April 1946 to prepare a Constitution for the new agency. The sense of urgency resulted in the calling of an International Health Conference in June of the same year and it was this Conference which agreed the Constitution of the World Health Organization. Henceforth the conception of health was to be broadened and the health of all peoples was seen to be fundamental to the attainment of peace and security. Without waiting for the formal ratification of the Constitution by the required number of Member States, an Interim Committee was set up to continue the health work of the League of Nations and take over the health activities of UNRRA and the Office International d'Hygiène Publique. The First World Health Assembly met in June 1948 at which the delegates from all but two of its first fifty-five Member States were confronted with the immensity of their technical and administrative task. One of the Assembly's major decisions was to decentralize the work and to create a regional structure which could bring the Organization nearer to its Members.

2.2 Then and now

Since the setting up of the Interim Commission the membership of the World Health Organization has grown from 48 to 150. Profound changes have taken place in many aspects of the health situation of its Member States.

Though reliable statistics are rare for the early period of the Organization's life, the Population Division of the UN and the Health Statistics Division of WHO have produced what are generally accepted as the most reliable estimates. The expectation of life at birth is perhaps the best combined indicator of social achievement; the following table illustrates the progress which has been made in the last 25 years:

LIFE EXPECTANCY IN YEARS	1950	1975
Global	46.7	57.2
More developed regions	65.0	71.7
Less developed regions	41.6	54.6

The gap between the more developed and the less developed regions of the world has narrowed from 23.4 years to 17.1. This improvement is the end result of economic, agricultural, educational and other changes but among them the direct health interventions have been a major factor as can be seen from the decline which has taken place in some of the worldwide causes of death.

INFANTILE MORTALITY RATES reflect partly the socioeconomic situation and partly the health service development. The experience of the following sample of countries is typical of the various regions of the world:

Infantile mortality/1000 live births				
Egypt	1950	171	1972	114.0*
Mexico	1950	96	1972	60.9
Japan	1950	60	1972	11.7
Thailand	1950	62	1972	27.0
Austria	1950	66	1972	25.2

TUBERCULOSIS

For Tuberculosis which reflects partly socioeconomic conditions but mainly health interventions the decline in the death rate has been more striking:

TB mortality rate per 100 000 of the population

		Town rate 1950	Whole country rate	
Egypt	Cairo**	76.6	1971	8.5
Peru	P"-Lima	250.6		32.0
Japan	Osaka	170.1	1972	11.7
Austria	Vienna	61.2		11.5
Thailand	P"-Bangkok	203.8		20.7

TYPHOID AND PARATYPHOID

The death rate from typhoid and paratyphoid reflects mainly public health interventions (pure water supplies and treatment).

Typhoid and paratyphoids mortality rate per 100 000 of the population

		Town rate 1950	Whole country rate	
Egypt	Cairo	13.8	1971	1.5
Peru	Lima	7.0		7.2
Mexico	P"Mexico City	11.5	1972	10.4
Japan	Osaka	1.0		0.0
Thailand	P"-Bangkok	14.7		1.2

* Preliminary or estimated data.

** Statistics for the whole country were not available in 1950 and principal towns were therefore used.

P"- Present or de facto population.

DIPHTHERIA

The mortality rate from Diphtheria represents a purely public health intervention:

Diphtheria mortality rate per 100 000 of the population

		Town rate 1950	Whole country rate	
Egypt	Cairo	5.1	1971	0.4
Peru	P"-Lima	0.7		0.0
Mexico	P"-Mexico City	1.8	1972	0.2
Japan	Osaka	1.4		0.0
Thailand	P"-Bangkok	4.5		1.9

MALARIA

Malaria - perhaps the most widespread killing and debilitating disease of the tropical world and one of the most difficult public health problems to tackle both in organization and technique - is gradually coming under control. Of the 1973 million people who are now living in areas which were malarious in 1956 when WHO started its worldwide campaign, 810 million have been protected. 805 million are living in areas receiving active protective measures and 358 million are still beyond the reach of the control measures.

SMALLPOX

The worldwide incidence of smallpox which was estimated to be as much as 15 million cases in 1967 has in nine years been reduced to zero. A fuller description of this programme is given on pages 12-13.

As a result of these events in which WHO has been so actively involved, the gap between the health status of the rich and the poor countries has narrowed significantly. The energetic application of public health measures backed up by general social and economic progress may eliminate this gap by the end of the century.

2.3 WHO's role

It would be a contradiction of its own philosophy to suggest that WHO has been directly responsible for all these changes as one of the Organization's guiding principles is that health services are part of social development and cannot be effective in isolation. WHO is, however, the directing and coordinating agency which, through its extensive roots in its Member States,

has been able to bring together and focus the world's talents, experience and material resources to put them at the disposal of each and every country.

In taking over the health functions of the League of Nations and in developing its six general programmes of work for specific periods, WHO has assumed two main roles. The first role makes WHO responsible for worldwide health intelligence, standard setting and legislation; the second advisory andexecutive role makes the Organization responsible for direct assistance to its Members and for research coordination.

The first role requires WHO to collect and distribute promptly epidemiological and scientific information of various kinds which is useful to Member States in the planning and day-to-day managing of their health services and elaborating standards and criteria for a variety of biological and organizational problems. By agreement among its Members, it is the legislative guardian of the International Sanitary Conventions which is the only respect in which any UN organization has been accorded a quasi supranational status.

The second role of advice, assistance and research required a philosophy, a decision-making process and a staff of competent health workers willing and able to translate that philosophy into action. This role is spelled out in Article 2 of the Constitution which among many other functions states that the Organization shall:

"(a) act as the directing and coordinating authority on international health work;

(b) establish and maintain effective collaboration with the United Nations, specialized agencies, governmental health administrations, professional groups and such other organizations as may be deemed appropriate;

(c) assist Governments, upon request, in strengthening health services;

(d) furnish appropriate technical assistance and, in emergencies, necessary aid upon the request or acceptance of Governments;

(j) promote cooperation among scientific and professional groups which contribute to the advancement of health;

(k) propose conventions, agreements and regulations, and make recommendations with respect to international health matters and to perform such duties as may be assigned thereby to the Organization and are consistent with its objective;"

These statements stress both the independence and interdependence of countries in promoting health, the responsibility of governments for the health of their citizens, as well as the need for coordination and technical assistance in getting the work done. They also underline the interdependence of WHO, the other members of the UN family, such as UNICEF, ILO and the Office of the High Commissioner for Refugees and the non-governmental organizations such as the International Red Cross whose contributions have been so justly recognized by the Nobel Foundation.

2.4 From principles to practice

The decision-making mechanisms of the World Health Assembly, the Executive Board and the Regional Committees, translate these principles into worldwide political and administrative terms. The features of the Constitution which have been equally important in giving depth to this universalism are the conception and methods of work of the secretariat and the widespread participation of experts from all countries in providing scientific advice to the Organization and in direct assistance to countries.

It is one of the major achievements of the Organization that it has managed to recruit and retain a staff comprising 91 nationalities which works harmoniously and effectively together in spite of widely different cultural and political backgrounds. The consultants and experts WHO has been able to attract from all parts of the world represent the finest minds available in their particular fields.

The expert advisory panels covering its main programme are a means whereby WHO can have permanently at its disposal the views and assistance of the leading experts of countries in all stages of development. Problems can be referred to them at any time for comment and guidance and it is from the membership of these panels that participants are chosen to serve on the expert committees which advise the Director-General on technical problems.

There are now some 44 advisory panels with 2700 members. They come from 101 countries. Panels change according to need and their composition is constantly renewed.

Another practical and effective way of obtaining advice or assistance and disseminating WHO's policies among professional groups are the "Non-governmental bodies in official relations with WHO". There are now 114. These include such humanitarian organizations as the League of Red Cross Societies, the major professional organizations such as the World Medical

Association, the International Council of Nurses, the International Federation of Medical Students Associations, the International Dental Federation, and the international associations devoted to special subjects such as the International Association for the Prevention of Blindness, the International Union for Health Education, the International Planned Parenthood Federation and the International Union against Tuberculosis.

The insistence of WHO on a broad geographical spread among its staff and advisers has proved essential to the adjustment of technology emanating from one culture to requirements and environments of quite different cultures. The benefits from this network of exchange are becoming increasingly evident. It is thanks to WHO, for instance, that experts from many countries who might never normally meet are brought together to discuss on a basis of complete equality matters of concern to the world's health. This has been particularly valuable for experts from developing countries whose opportunities for face-to-face discussion with their colleagues from other countries are often very limited.

Through this multifaceted approach which enables governments, experts and staff to have permanent contact and reach agreed solutions, the Constitution has remained an effective policy guide and working instrument.

3. HOW HAS WHO CARRIED OUT ITS MANDATE

Experience over the last 30 years has reinforced the essentially social basis of its Constitution. While recognizing the needs of individual patients and assisting countries to improve their clinical services, the thrust of WHO's work has been towards social medicine because it believes that through social action improvements in thehealth status of the greatest number can be achieved. Such an approach means essentially that health services of an acceptable level must be made available to the whole population. Environmental improvements such as pure water supplies and clean air; preventive measures such as vaccination, immunization and the control of disease vectors; and measures to promote health such as nutrition, health education, the care of mothers and children and family planning can radically change the health status of a population at a fraction of the cost of clinical services to the sick.

The programme of work depends first and foremost on the expressed needs of individual Member States and WHO endeavours to meet these needs promptly and effectively. However, some of these needs are common to many countries and the Member States, through WHO, are able to coordinate their efforts, share their experience and even act together. Such unprecedented international events as the decision to eradicate malaria and smallpox on a worldwide scale are examples of the extent to which countries have come to recognize their interdependence. Some contribute money, some expertise or new inventions, others materials and manpower to the common effort. In such a vast and varied programme some examples of action in various sectors may help to clarify the nature of its coordinating role and its dependence on the tradition of shared responsibility which motivates its Members.

3.1 The control of communicable disease

Infectious disease which crosses frontiers of both friend and foe has been throughout the ages more lethal even than war. From its early country by country operations, of which the eradication of tropical yaws by the first extensive use of long-acting penicillin was a good example, grew the experience which enabled the Organization to take its historic decision in 1956 to attempt the eradication of MALARIA. Technical advances in insecticides and small-scale pilot projects encouraged health officers, scientists and politicians to regard the task as feasible.

MALARIA

The aim was to create an organization capable of reaching out to the remotest hamlet in countries where the disease was endemic and to spray the walls of every house with insecticide capable of killing the anopheline mosquitos which settled there at night. Such an operation had never been attempted before and, in spite of the gigantic logistic effort involving thousands of professional workers, labourers, research workers and manufacturers of insecticide and the cooperation of millions of householders, the goal has not yet been reached. A very substantial reduction in the mortality from malaria has been achieved but many areas where the mosquitos breed all the year round are still exposed. The failure to achieve eradication quickly could have been a severe discouragement to international cooperation but has proved a major learning experience for WHO and the countries which took

part since they were forced to face up to the multiple research, technical, organizational and social difficulties which international cooperation involves. WHO learned the fundamental lesson that such a programme can only succeed if governments in all affected countries agree to create a health infrastructure which covers the whole population and which is capable of monitoring the situation permanently with competent health workers and maintaining the active cooperation of the local population. Malaria is playing a similar role in many developing countries that cholera played in the last century for many of the now more developed countries.

SMALLPOX

These lessons were of the utmost importance when the Organization took its second major decision to attempt the eradication of smallpox. How to prevent this ancient scourge has been known for 200 years and numerous attempts to control it had been made.

The disease which over the centuries has killed, blinded and disfigured countless millions of people and even changed the course of history was estimated to claim some 10-15 million cases in 1966 when the World Health Assembly courageously decided to embark on a global programme of eradication.

There was scepticism in high places. The malaria experience counselled caution but provided a number of valuable lessons. No disease had ever been eradicated before and the 30 countries where smallpox was endemic were among the poorest, their health services rudimentary and lacking trained personnel and communications in their rugged hinterland some of the most difficult in the world.

250 million doses of vaccine were required annually which was nearly double the world's production capacity at the time; the normal vaccine was unreliable in tropical conditions; outbreaks were grossly under-reported and in many places there was fatalism among the staff and even resistance among the population. To tackle these multiple problems a new strategy and a new technology were needed which could be applied on a scale never before attempted; but most important of all a new spirit of optimism was required in the national health services.

Two major technical breaksthrough were achieved - the development of freeze-dried vaccine and a simple bifurcated needle which produced effective vaccination with one quarter of the vaccine usually required. At the outset, freeze-dried vaccine could only be produced in a few countries but by

simplifying the production metho it is now being manufactured in many developing countries. The recr ment and training of hundreds of thousands of vaccinators was accomplished b teams of national and international staff. Health authorities and their field workers were prepared for the new strategy and imbued with the confidence and drive to conduct a campaign which required them to work through to the most isolated hamlets of their countries, to remain vigilant when success was obtained and to persist even when the population was hostile.

Between 1967 and 1973 the number of countries where smallpox was endemic had declined from 30 to 5. The World Health Assembly asked these countries to accord the highest priority to the programme. This meant intensifying the search for cases, perfecting the reporting system and arranging for vaccinators and vaccines to reach affected villages promptly in large areas of Asia and Africa. It was an heroic undertaking but in the space of 9 years it has been crowned with such success that smallpox appears to be the first human disease ever to be eradicated from the world by the action of man.

Countries must remain vigilant for some time to ensure that no pockets have been missed and no recrudescence occurs but most gratifying to WHO is that their confidence bred of achievement is expressing itself in a dramatic increase of interest and activity in the whole range of immunization against preventable disease and that they have taken an important step along the road to social medicine.

With this remarkable success behind them the Member States have decided to expand the immunization programme to cover the full range of communicable diseases against which effective vaccines are available or can be developed.

3.2 Health services

The threat of epidemic disease was the stimulus for the sanitary revolution which swept the industrializing countries in the Nineteenth Century. At the same time rapid scientific advances were being made in medicine and surgery. Since most of the measures needed for the public health were generally desirable for improving the environment, the food and water supply or the conditions of labour, they were often taken over by a variety of government departments while clinical medicine built up a separate and generally private system for dealing with the sick. Since

the First World War, many countries have come to accept that the care of the sick is a state responsibility but, whether private or public, the clinical work which attracted the most energetic and gifted research workers and practitioners has expanded and become sophisticated to a degree that its costs are now a serious preoccupation of many governments. The effectiveness in health terms of its further expansion is, however, being seriously questioned in even the richest countries.

With its accent on the countries in greatest need it is the creation of health services adapted to these needs which dominates WHO's programme. For instance, the process of decolonization which has been going on throughout the life of WHO has affected the Organization in many ways. Many new Member States have come into existence and are establishing their identity. Some inherited reasonable health services, others were left virtually destitute. In both cases it became necessary for WHO to rethink the health priorities and to consider what advice to give to countries wishing to restructure the services on the basis of very restricted budgets and the absence of a large proportion of theirprevious health manpower. The social pressures within countries which were stimulated by independence also called for the rapid extension of health services to the entire population and the redirection of the very limited budgets away from costly central hospitals towards much simpler peripheral health services.

The major problem for the membership of WHO has been what pattern to recommend. Even if it were desirable, it is clear that the economically weaker countries could not afford the costly superstructure which clinical medicine with its concentration on the individual patient has created. As a result of organizational decisions in individual countries, many examples are now available of simplified systems which unite clinical and preventive medicine and give pride of place to service to the whole community rather than high cost service to the few.

After prolonged debate and in close collaboration with UNICEF, the World Health Assembly in 1975 reached agreement on a major programme of Primary Health Care,* the essence of which is to assist countries to build up health services which provide for the basic needs of the total population and particularly those living far from urban centres, etc., who in many countries have been largely neglected by traditional medical services.

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* See the Annual Report of the Director-General, The Work of WHO 1975, pp. 4-5

The planning and creation of such social health services in developing countries which lack financial resources and trained manpower is a relatively new venture which requires new concepts and approaches on the part of the authorities and considerable participation by the local population in all its aspects. Organization has drawn on the experience of its Members and devoted considerable efforts to work out cost-effective methods which countries can use to identify their needs, to establish priorities and to select organizational and technical methods which will bring the maximum improvements in the health status of the entire population.

Such goals require major changes in the training and distribution of manpower and may even require the creation of some new types of manpower whose outlook and skills are adapted to the problem of rural people. The coordinated development of services and manpower is a relatively new undertaking and WHO is devoting much attention to its planning. At the World Health Assembly in 1976, it was resolved to hold an International Conference on Primary Health Care in 1978 sponsored by WHO and UNICEF.

3.3 The development of health manpower

One of the first acts of the Interim Commission in 1948 was to provide 250 fellowships to enable health workers to study abroad. Since that time WHO has devoted a substantial part of its budget to assisting countries to become self-sufficient in the preparation of their own health workers. This has taken many forms ranging from on-the-spot training for indigenous midwives using methods and curricula suitable for illiterates to seminars for specialists on sophisticated methods for combining educational planning with manpower development systems. Some have been undertaken to meet emergencies, others are long-term programmes.

At the World Health Assembly in 1976, a major resolution was passed endorsing the Secretariat's paper based on a two year study which introduces a comprehensive new approach to the development of health manpower.*

Two examples will illustrate types of approach used. When the UN was called on to assist Zaire, it requested the WHO to take over the health sector. The country at that time was left virtually with no medically qualified personnel to staff the well-developed hospital system

* A29.15

left by the Belgian administration. The first emergency measure involved recruiting a corps of doctors willing and able to work in the chaotic situation which then existed. This was achieved by a worldwide search through the contacts available to WHO in its Member States. The response was very good but the long-term problem remained of providing the country with its own medical corps. Time was of the essence but formal medical training usually takes up to 7-8 years. A very original scheme was worked out to overcome this problem. Zaire had a considerable number of medical auxiliaries who had been well-trained in a practical way. These were men in their thirties and forties who did not have the baccalaureat and were therefore ineligible for normal medical schools. WHO appealed to France and Switzerland to accept these people into their medical schools. The two countries later followed by Belgium took the courageous decision to attempt a revolutionary step and a 3-year course was worked out between the faculties and WHO which took into account the practical experience of the medical auxiliaries. Faculty members volunteered freely to coach small groups of students during the vacations and WHO kept in close touch with every student through its Consultant who attended not only to the educational needs but more significantly to the multiple social problems to which the students and their families were exposed in an environment of which they had no experience. When their studies came to an end, 150 of the 152 candidates passed their final examinations in full competition with their French colleagues. They all returned to Zaire and are now working there. The remarkable success of this emergency programme can be justly attributed to the spirit of international brotherhood which motivated the medical faculties to take such a risk and to the exceptional efforts made by the students from Zaire.

3.4 Fellowships

One of the earliest and most sustained programmes of WHO has been that of fellowships. The primary aim of the programme is to strengthen the health services of the country from which the fellow comes. The system which has evolved is a complex reciprocal arrangement whereby qualified citizens of one country are enabled through modest financial grants to study in the institutions of another. Goodwill and friendly

relations betwee[illegible]e parties is essential to the exchange and the award of a fellowship [illegible]fits both the sending and the receiving country by improving technic[illegible] competence, casting a fresh light on old problems and increasing cultural understanding in a practical way. The 50 000 fellows of WHO trained by the programme since 1947 constitute not only a group with a certain solidarity but a worldwide network of professional people who communicate with one another and with their past teachers long after the fellowship is over.

At present some 5 000 fellowships are awarded every year in the whole range of medical and allied subjects. The developing countries receive the major share, which means that every year the countries in greatest need of trained manpower may receive back a substantial number of people with advanced training and a wider international outlook who can assume positions of leadership in their health services. It has also been evident for some time that training institutions in developing countries have not only multiplied but have improved their quality to a degree that they are now the receivers of international fellows and are playing an increasingly important role in improving the quality of life of their own and other peoples.

3.5 The health of working populations

The work environment consists essentially of people, processes and places. Industrial health hazards generally arise from dangerous materials, tools or methods of work, from behaviour patterns or from the location of the industry. Non-industrial activities, such as agriculture, seafaring, transport and office work share the risks in their own ways. But for WHO the most important aspect is that these hazards are of particular consequence for developing countries embarking on industrialization.

It is therefore in a broad context of social and preventive medicine that WHO collaborates with its Member States in strengthening their occupational health programmes by direct assistance, research and the training of their national personnel through fellowships and courses. When necessary, WHO cooperates closely with other organizations of the UN system, with industry and with occupational health institutes and laboratories. Cooperation with other Agencies takes many forms, for example, monitoring the long-term effects of exposure to old or new factors in the environment in cooperation with UNEP; the prevention of accidents which has been a major preoccupation of the European Region of WHO or the psycho-social factors in occupational health which were the subject of a conference organized by the Swedish Government and WHO in 1974. Work on the establishment of maximal permissible limits

for exposure to hazards was started through a joint committee of WHO and ILO. Radiation risks in medicine, the protection of workers in nuclear energy plants and the disposal of radioactive wastes are studied in collaboration with the International Atomic Energy Agency (IAEA).

Using a slightly different approach, WHO cooperates with the UN Environment Programme (UNEP) in seminars which confront industry and governments in general and specific fields such as the conservation of energy, pollution, etc. The recent seminar on the aluminium industry, which also involved the World Bank, ILO, ECE and OECD, is an example.

General concern regarding occupational cancer, combined with the long latent period between exposure and disease, has focussed attention not only on recently introduced agents but the unexpected effects of substances used for many years. For example, a major contribution to our knowledge about asbestos-induced cancer came from WHO's International Agency for Research on Cancer (IARC).

Another facet of WHO's concern for the quality of life is the attention being given to the working conditions of nurses. A major bottleneck in developing health services, particularly in rural areas of developing countries, is the shortage of qualified staff. This is partly due to the unattractive status and conditions of service enjoyed by health workers. WHO is naturally interested in overcoming these difficulties as a precondition for extending health services.

As an example, consider the status, recruitment and retention of nursing personnel. ILO took an interest in the matter as long ago as 1930 and WHO recognized the key role of nursing at its first Assembly in 1948. The two organizations, together with the national and international professional associations concerned, have been collecting evidence through research, practical experience and the meetings of experts. As a result, in 1967 the Governing Body of ILO requested its Director-General to cooperate with WHO in preparing an international instrument* on the status of nursing personnel. ILO, WHO and the professional organizations, in consultation with governments, have completed a global report on the organization of nursing services; training; professional standards; conditions of service, remuneration and social security, etc., which will be placed before the ILO Governing Body in June 1976 as a basis for the preparation of the international instrument.**

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* Official Bulletin ILO 1968, Resolution 63

** International Labour Conference 1976, Report VII (1 and 2), ILO Geneva

3.6 In tension and strife

From the early days WHO has been called on to deal with major emergencies and, working closely with other agencies of the UN and particularly with the Red Cross and UNICEF, it has assisted governments and peoples in situations of tension, conflict and disaster. Among many other actions it was responsible for the health services for the Palestinian refugees and the training of their health workers; it was responsible for the rehabilitation of thehealth services of Zaire and it has cooperated substantially in the recent relief action in Cyprus. The Emergency Service of WHO has intervened in earthquakes in Central America, floods and tidal waves in Bangladesh and in the great famine of the Sahel.

Following in the tradition of the Geneva Protocol of 1925 for the prohibition of chemical and bacteriological warfare which up to date has been well observed by nations at war, the World Health Assembly recalling several previous resolutions on the relationship of health and peace declared itself

> "Convinced of the necessity of achieving a rapid international agreement for the complete prohibition and disposal of all types of chemical and bacteriological (biological) weapons under an effective system of controls which will ensure full compliance by all parties." (WHA22.58, 1969)

One of the most important results of this resolution directly connected with the prevention of war was the study made at the request of the UN on the Health Aspects of Chemical and Biological Weapons in 1970 which provided the basic material for the treaty of 1972. The report is a detailed and sober appraisal by a group of experts of the known chemical and biological agents which could be used for warfare, and the likely effects of their use on human populations at different levels of socioeconomic development.

If it is reasonable to assume that the horrors of war are a deterrent to warmakers, this report is the strongest possible argument against embarking on the use of chemical and biological weapons.

Examples of international cooperation could be given for all the areas in which WHO and its Member countries are cooperating to solve national or international health problems such as family planning, nutrition,

water supplies, etc., but before leaving the executive role of WHO it is necessary to describe how all these activities have their research component.

3.7 Research

In the breaking of new ground in many WHO activities, such as yaws, malaria, the organization of health services and educational technology, problems constantly arise which require research. Incorporating the results of the vast output of national research institutions is also a constant challenge if WHO's advisory services are to remain abreast of current progress.

In spite of its extensive involvement in research, WHO does not generally undertake research itself, the major exceptions being its International Agency for Research on Cancer in Lyons and the Central American Nutrition Institute in Guatemala. WHO's main role is to be a coordinator of research for its Member States and it now has some 548 collaborating institutions and reference centres round the world. This ability to bring together and focus the research potention of its Member States both stimulates their interests in international problems and provides a far greater network of activity than anyone of them could achieve on its own.

The activities, both central and regional, cover basic and applied research. In addition, an important means for strengthening existing research centres and creating new ones is the award of Research Training Grants to young scientists which enables them to work abroad under the guidance of the most experienced research workers wherever they may be located.

Following its policy of decentralization, WHO is now concentrating on the expansion or creation of new research centres in developing countries in order to focus attention on local problems in the environments in which they arise. For instance:

> "In late 1974, a tropical disease research group was established in WHO to work with the staff in Geneva and the Regional Offices on the special programme for research and training in tropical diseases. This is an example of a goal-oriented project completely in line with the New Economic Order. The goals are to obtain effective new vaccines, diagnostic tests, drugs, and measures for vector control through research and development and concurrently to assist the tropical countries to improve their own research. The

"special programme, which will be concerned with malaria, schistosomiasis, filariasis, trypanosomiasis, leishmaniasis, and leprosy, will work through multidisciplinary task forces of scientists from all parts of the world who have been selected for their skills in biomedical research and their knowledge of tropical diseases." .....

"Striking features of the special programme are its multidisciplinary scientific approach and the planning and funding of its activities on a world scale. It aims to become a platform for partnership between the developing countries of the tropics and the industrially developed countries to assist some of the most forgotten and most neglected groups of the world's inhabitants."*

Since 1959, the policy and the progress of the programme have been proposed and followed up by the Advisory Committee on Medical Research (ACMR) which includes leading scientists from countries in all stages of economic development. Since its inception, 83 members, several of whom have been honoured by the Nobel Foundation, have served on it. It meets annually to consider research proposals and gives its advice to the Director-General.

WHO's approach to the problems of human reproduction illustrates well the reciprocal relationship between countries, the secretariat, the ACMR and other scientific bodies.

The first proposal that WHO should include family planning in its programme was made by Norway in 1953. There was, however, delay in entering this field due to the political, religious and other scruples of several Member States regarding family planning and demographic policy. On a matter of such sensitivity they preferred to postpone any decision until a consensus was reached. This did not finally take place until 1968 when the World Health Assembly took a major policy decision by resolving that since the proper spacing of births was of benefit to the health of mothers and children the Organization should on request assist Member States to integrate family planning within basic health services. WHO did not consider demographic policy to be within its competence.

In the meantime, however, it was apparent from the report of a Study Group which met in 1964 that the scientific information available on human reproduction was seriously deficient and in 1965 the World Health Assembly did decide to embark on research. The ACMR was consulted and a long-term strategy was developed which would include the assembling of existing knowledge and indicate the direction of future studies. The research effort required an international mobilization of scientific and financial resources and a balanced approach having due regard to the sensitivities inherent in the subject for many peoples.

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* The Annual Report of the Director-General, The Work of WHO 1975

Since that time more than fifty Study Groups have met to consider the scientific, clinical and public health aspects of human reproduction. In 1975 some 600 senior scientists from 60 countries, 40 of which are developing countries, were cooperating on research into methods suitable for use in areas where health services are rudimentary.

The research programme now covers:

- the health rationale for family planning
- the assessment, development and improvement of fertility regulating methods
- the service delivery of fertility regulating methods
- infertility
- and diseases of pregnancy and foetal disorders.

It is interesting to note how a very sensitive issue for Member States was resolved by a step by step discussion and the accumulation of evidence. In this process many national bodies cooperated, and notably the Karolinska Institute of Stockholm.

We have described how the Organization carries out its advisory, executive and research functions but behind this lies the equally important intelligence network and the legislative and normative responsibility which its Members have entrusted to it.

4. INTELLIGENCE AND SURVEILLANCE

The worldwide surveillance services which monitor such events as outbreaks of disease and adverse reactions to drugs involves the continuous and day-to-day scrutiny of the reports from the health authorities of Member States.

The information is processed by WHO and circulated to Members by a variety of means such as daily telegrams, a twenty-four hour service by telex, regular and occasional publications. etc.

Basic information is now being supplemented by field studies which include ecology, animal reservoirs and the collection of immunological information which carries the whole intelligence system on to a higher plane as it enables WHO to check information received, assess with greater certainty the need for intervention and predict future trends. WHO is

now able, for instance, to inform health authorities about the type of influenza that may invade their country so that the appropriate vaccine can be prepared in advance.

Its functioning was well illustrated in the current cholera pandemic which spread from a focus in South-East Asia and invaded much of the rest of Asia, Africa and Southern Europe. The spread was monitored from country to country and health authorities were warned so that they could prepare themselves.

In 1962, WHO called together a scientific group to decide whether a new kind of cholera (El tor) which had been notified was a quarantinable disease. The group decided that it was and from this moment the search began for the organism in other places. Reports began to reach WHO which indicated an eastward and a westward spread. The first conclusive evidence came from the School of Tropical Medicine in Calcutta - one of WHO's Collaborating Centres. Based on experience of earlier pandemics and the information received from its collaborating centres round the world, WHO was able to predict in 1964 that this new pandemic would most likely spread to the rest of Asia, Southern Europe and Africa. The warning was given by the Director-General and a bulletin devoted to cholera was started dealing with the scientific, practical and legal aspects of its control. A simple and cheap method of treating cases by rehydration was developed and standardized and research to improve preventive vaccines stimulated.

Cholera is still a dreaded disease and countries are sometimes reluctant to declare it because of its effect on trade and tourism. When in 1970 it was proved that cholera had invaded Africa, WHO, in spite of the displeasure of some Member States, warned the world. It is only an international organization with the prestige of WHO that could have overcome the resistance and only an organization which could call on the collaboration of laboratories all over the world which could have made what amounts to the first long-term prediction of pandemic spread.

5. LEGISLATION

The importance of a legislative framework was recognized by the Interim Commission in 1947 and resulted in a decision in 1949 to publish an International Digest of Health Legislation which would contain complete

documentation of as recent a date as possible on national health laws and regulations. Obtaining agreement between countries sufficient to formulate regulations is a long and arduous process as the matters dealt with are often embedded in existing national legislation. Advances in technology frequently render certain aspects obsolete in one country while remaining relevant in another.

The International Sanitary Regulations for which WHO is statutorily responsible illustrate well how agreements are reached. The Regulations refer to the six quarantinable diseases - plague, cholera, yellow fever, smallpox, typhus and relapsing fever.

The Committee on International Quarantine meets about once a year and reviews the application of the Regulations and makes recommendations for their modification in the light of changing patterns of international traffic, scientific advances, changes in epidemiology and day-to-day experience. As a result of such deliberations, some measures may be relaxed, for example, it is no longer mandatory for a ship arriving in one country from another to submit the Maritime Declaration of Health: others may be strengthened, for instance countries are obliged to notify WHO of imported cases of quarantinable disease and governments may require individuals arriving from a country where diseases "constituting a grave danger to public health" exist to give a destination address in writing.

In order to keep Member States informed, WHO publishes the Weekly Epidemiological Record. It is an up-to-date report which provides the information on which quarantine officers can rely when deciding on such matters as whether to apply quarantine regulations to travellers and whether to interfere with the free entry of goods.

6. THE NORMATIVE ROLE

The normative role of WHO is gradually emerging. As countries compare their performance with that of others, WHO is becoming more and more regarded as the central organization which should propose standards for such a variety of subjects as the quality of medical education, the effectiveness and safety of drugs and biological preparations, the conditions of service for health workers, and even diagnostic criteria

and technical procedures for many communicable and some non-communicable diseases such as malnutrition, mental disorders and chronic degenerative diseases. For instance, in the area of biological standards and working preparations, WHO has now defined more than 300 which provide baseline references for all countries. In nomenclature for diseases, it is WHO that has been entrusted with preparing the official international guide. However cautious and hesitant, the confidence such a trend displays in the value of international agreement on matters of national importance is significant evidence of the growing acceptance of WHO as the "directing and coordinating" agency in international health work.

7. CONCLUSION

During WHO's lifetime, the gap in the health status between the rich and the poor countries has narrowed considerably and in this sphere the quality of life has improved for many millions of people. Though WHO recognizes in its programmes for the future that there is no room for complacency, it can take much of the credit for what has already been achieved.

In this process, WHO has been the cradle of new and courageous ideas:

The concept of health as a human right;

The concept of global responsibility for health and coordinated multilateral action;

The concept of the total eradication of a disease from the world; and

The concepts of world epidemiological intelligence and standard setting have been proposed and realized by WHO.

The concept of Health Services for all by the year 2000 is the challenge for the future and will be WHO's contribution to the New Economic Order. These accomplishments spring from the practical faith of the citizens and governments of 150 countries which have agreed to cooperate for the promotion of the health of all peoples. Some of these agreements are statutory, others are by resolution, but in both cases they have been sufficiently binding to bring about such historic events as the eradication of one of Man's most terrible scourges - smallpox.

If the consensus of world opinion is correct in stating that "health is one of the pillars of peace", then WHO has made an unique and unparallelled contribution which has been made possible by WHO's ability to embrace one of Alfred Nobel's guiding principles and to realize a "fraternity among nations".

It is this record of 30 years of innovation and achievement that justifies the presentation of WHO to the Nobel Committee of the Norwegian Storting as a worthy candidate for its Peace prize.

8. POSTCRIPT

Some reflections on the World Health Organization by its Directors-General

Dr. Brock Chisholm, the first Director-General of WHO (Canadian nationality), in his first Programme and Budget statement in 1949 said:

"Public health officers have for long affirmed that economic development and public health are inseparable and complementary and that the social, cultural and economic development of a community, and its state of health, are interdependent.

"The practical application of these axioms has so far been the exception rather than the rule ..... If the right to health, which is indistinguishable from the most fundamental of all human rights, the right to life, is to be guaranteed, the relative scales of investment must be revised .....

"The programme for 1950 is based mainly on cooperative projects of advisory and demonstration services, with special reference to underdeveloped and undeveloped areas and to areas devastated or partially crippled by the war. The success of these services will stimulate further investments by national, international and private agencies throughout the world. Just as investment in the health of thepeople has always paid much wider dividends than were envisaged at the time, so it can be expected that these demonstrations, not only of world solidarity, but also of the feasibility of the attainment by all peoples of the highest possible level of health, will convince the world of the necessity for still greater investments which will lead to further dividends in productivity, social stability, mutual understanding and economic development and regeneration which can only be dimly forecast at the present time."

Professor [illegible]colino Candau, who was Director-General of WHO from 1953 to 1973 (Brazilian nationality), wrote in his introduction to The First Ten Years of the World Health Organization in 1958:

"For me, this measuring, this looking back over the road we have travelled, vindicates my constant optimism and reinforces my own confidence in the Organization's destiny. The increasing desire on the part of our Member States to cooperate in the Organization's activities is yet another sign of this same confidence: if they had no faith in the Organization's future they would not cooperate with such wholeheartedness in its activities - and this applies not only to governments but also to scientific institutions, to administrators, as well as to thousands of scientists and research workers the world over who every day, in their laboratories, are quietly pursuing our common ends.

"It is because of this persistent faith and hope that the Organization, in this auspicious year, finds itself, in spite of some setbacks, once more on the highroad to that universality which was its primary ideal and is now very nearly the world organization its founders intended it to be."

In 1968 he wrote in his introduction to The Second Ten Years of the World Health Organization:

"Today is the twentieth anniversary of the World Health Organization. It is an appropriate occasion for rejoicing. The Organization is itself a sign of the will of the nations of the world to act together, across national boundaries, in order to protect and improve health. Every year that passes proves more clearly their desire to work collectively and in comradeship for the solution of worldwide health problems, and to bring assistance to individual countries in their need.

"Health is part and parcel of economic and social development and man is the prime mover in that development. Without him development has no meaning. And without health, development has no hope of putting down its roots. Evident as these facts are, they are not easy to express in terms of the dividends that are yielded by expenditure on health.

"Many new health problems about which we have much to learn require international action, and may affect the developed countries also. But the hope and expectation that were our main support in earlier years have been replaced by a positive feeling of confidence that combined efforts can achieve results unattainable by individual action over a similar period of time."

Dr. Halfdan Mahler, the Director-General of WHO (Danish nationality) in 1975, addressing the Regional WHO Organizations: for Africa, The Americas and the Western Pacific:

"To be effective, planning by ministries of health must therefore transcend the limitations of medical technocracy andbecome integrated into the mainstream of political decision-making activity.

"Close contact will have to be maintained between ministries of health and central planning ministries where these exist, as well as with all other ministries and authorities dealing with social and economic development. These, and other contacts, such as with universities, research institutions, and teaching hospitals, should be used to ensure that bilateral and multilateral cooperation for health is channelled into programmes that conform to the country's priority health needs in such a way as to promote national initiative rather than to smother it. An excellent example of the use of national and international resources in this way is afforded by the global smallpox eradication programme, the success of which was due to its ability to identify simply yet precisely what action needed to be taken and to mobilize all available resources, irrespective of their source, in pursuit of that action.

"The mobilization of public and professional opinion and support for health development programmes is a particularly important function of a vigorous ministry of health .....

"I emphasize the word "collaboration" because that is the essence of the Organization's new relationship with its Member States ..... Genuine collaboration implies joint review of problems with countries, and WHO can bring to this review information on the scientific knowledge and

"practical experience of countries all over the world and thus open out horizons with respect to possible solutions. It can also be active in coordinating the flow of external funds into health programmes that are of real importance to countries. This it will do at the request of countries wherever this approach is likely to be successful, as an international coordinating body functioning at all organizational levels. In no circumstances will it trespass on national authority, here or elsewhere.

"Let me finally return to the goal of "Health for all by the year 2000!" or, as I said at the outset, an acceptable level of health evenly distributed throughout the world's population. In other words, everybody everywhere would benefit from all the experience and knowledge of health care accumulated down the ages. Surely nothing in the whole of history would have a better claim to be called man's greatest achievement."

In commenting on the United Nations resolution regarding "The New Economic Order" Dr. Mahler in his Annual Report for 1975 says:

"The year 1975 was one of special importance for the World Health Organization and for the United Nations system as a whole. The United Nations General Assembly concluded its Seventh Special Session in September by unanimously adopting a resolution covering a wide variety of topics ranging from international trade to industrialization and food and agriculture and advocating the setting-up of what was termed a New Economic Order. This resolution may be considered as a turning-point in the history of the United Nations and of international cooperation, since it marked a striking reversal of the previous climate of confrontation between the richer and the poorer countries .....

"But what have economic arguments to do with health? Are such considerations directly relevant to the work and mission of WHO? Has the Organization a part to play in establishing and maintaining the New Economic Order? I believe that the answer must be an emphatic affirmative. I think it would be true to say that the General Assembly's deliberations and decisions have vindicated views that have long been expressed within this Organization. We are already analysing the contribution of health to rural development, of which economic development is only a part, and we are actively engaged with other agencies in promoting this rural development. We have a long way to go yet, but we have made a start in reorienting the Organization's programmes towards fostering social and economic development rather than confining ourselves to health development at the purely technical level. This process will now begin to accelerate."